



**2009 Performance Measures Specifications  
for the 2008 Measurement Year**

**SUMMARY OF CHANGES AND CLARIFICATIONS TO THE  
ASTHMA 2008 PERFORMANCE MEASURE SPECIFICATIONS**

| Topic   | Change  | Page(s) |
|---|---|---------|
| Included use of Drug ID from HEDIS 2008                     | Inhalers count as one dispensing event. For example, an inhaler with a 90-day supply is considered one dispensing event. In addition, multiple inhalers of the same medication (as identified by Drug ID in the Modified 2008 HEDIS Asthma Denominator list) filled on the <u>same date of service</u> are counted as one dispensing event. For example, a member may obtain two inhalers on the same day (one for home and one for work), but intend to use both during the same 30-day period. <b>Note:</b> this is only used for identifying people with asthma and persistent asthma, it is <u>not used for determining the number of dispensing of Inhaled Corticosteroids or Short-acting Bronchodilators in other parts of these specifications.</u> | 7       |
| Clarified difference in inhaler and non-inhaler dispensings | The National Drug Code (NDC) is not replaced by the Drug ID and is in the medication spreadsheet.<br>In review there was confusion from the addition of the HEDIS language on the use of Drug ID for determining dispensings of inhalers. Clarified in the prior steps that they are for non-inhalers only. This clarification was followed-up with NCQA for accuracy.  | 7       |
| Include only last two years of HEDIS medication list        | To use the Drug_ID code, which started in HEDIS 2008, we will use only two years of HEDIS medication lists merged together. This will allow for counting medications that may be phased out while removing medications from the list that have not been used in more than two years or that are now deemed inappropriate to use for people with asthma. The Oregon Asthma Program will maintain the full medication list for reference.   | NA      |
| Change in HEDIS 2009 Specifications                         | Removed CPT code 99499 from outpatient visit type table in task 3.  | 8       |
| Added section with history of changes to the specifications | Requested by Fully Capitated Health Plans and members of the Oregon Asthma Data Workgroup   | 13-14   |

## BACKGROUND

At the December 8, 2003 Division of Medical Assistance Programs – Quality and Performance Improvement (DMAP-QPI) Workgroup meeting, it was agreed that the DMAP Fully Capitated Health Plans (FCHPs) would measure two asthma indicators for calendar year 2003. This measurement decision continued for the 2004 through 2008 calendar years. This document provides step-by-step instructions for measuring indicators for the 2008 measurement year.

## PERFORMANCE MEASUREMENT

The asthma performance measures, or indicators, are listed below. Detailed instructions on how to calculate these measures begin on page seven of this document.

### Indicator 1 - Emergency Department (ED) Visits and Follow-up Care

- 1a. Percentage of members who met the asthma criteria and who had one (1) or more ED visits with a primary diagnosis of asthma, in member months.
- 1b. Percentage of ED visits with primary diagnosis of asthma that had a follow-up outpatient visit from 1 to 30 days after the ED visit.

### Indicator 2 – Pharmacology (measured in member months)

- 2a. Percentage of members who met the persistent asthma criteria and who received **at least one (1)** inhaled corticosteroid (ICS) medication **dispensing** in the past year, in member months.
- 2b. Percentage of members who met the persistent asthma criteria and who had an average of **more than 0.5** inhaled short-acting bronchodilator (SAB) **dispensings** (whether in the form of a metered dose inhaler [MDI] or nebulizer) per month, in member months. This is known as the “standard” measure.
- 2c. Percentage of members who met the persistent asthma criteria and who had an average of more than 0.5 inhaled SAB MDI **canisters and/or nebulizer dispensings** per month, in member months. This is known as the “enhanced” measure.
- 2d. Percentage of members who met the dual criteria of having persistent asthma criteria **and** having two or more inhaled SAB canisters and/or nebulizer dispensings who had a medication ratio greater than or equal to 0.33 in a year. Optional, but also recommended, is to analyze this indicator using a ratio greater than or equal to 0.5 in a year. The ratio for this measure is calculated using the following formula:

$$\text{Ratio} = \frac{(\text{Canisters of ICS})}{(\text{Canisters of ICS}) + (\text{Canisters of inhaled SAB})}$$

Other Oregon-specific asthma indicators exist that will not be measured by all the FCHPs at this time. For more information on the specifications in this document or other indicators of asthma care, please contact the Oregon Asthma Program epidemiologist (Rodney Garland, at 971-673-1348 or [rodney.garland@state.or.us](mailto:rodney.garland@state.or.us)) or refer to the document *Technical Specifications for Quantifying Measures in the Guide to Improving Asthma Care in Oregon: Measuring Quality of Care in Health Systems* (<http://www.oregon.gov/DHS/ph/asthma/docs/techspec.pdf>).

If you are interested in knowing more about the origins of these indicators, please refer to the *Guide to Improving Asthma Care in Oregon* (<http://www.oregon.gov/DHS/ph/asthma/guideor.shtml>) and the technical specifications mentioned in the above paragraph.

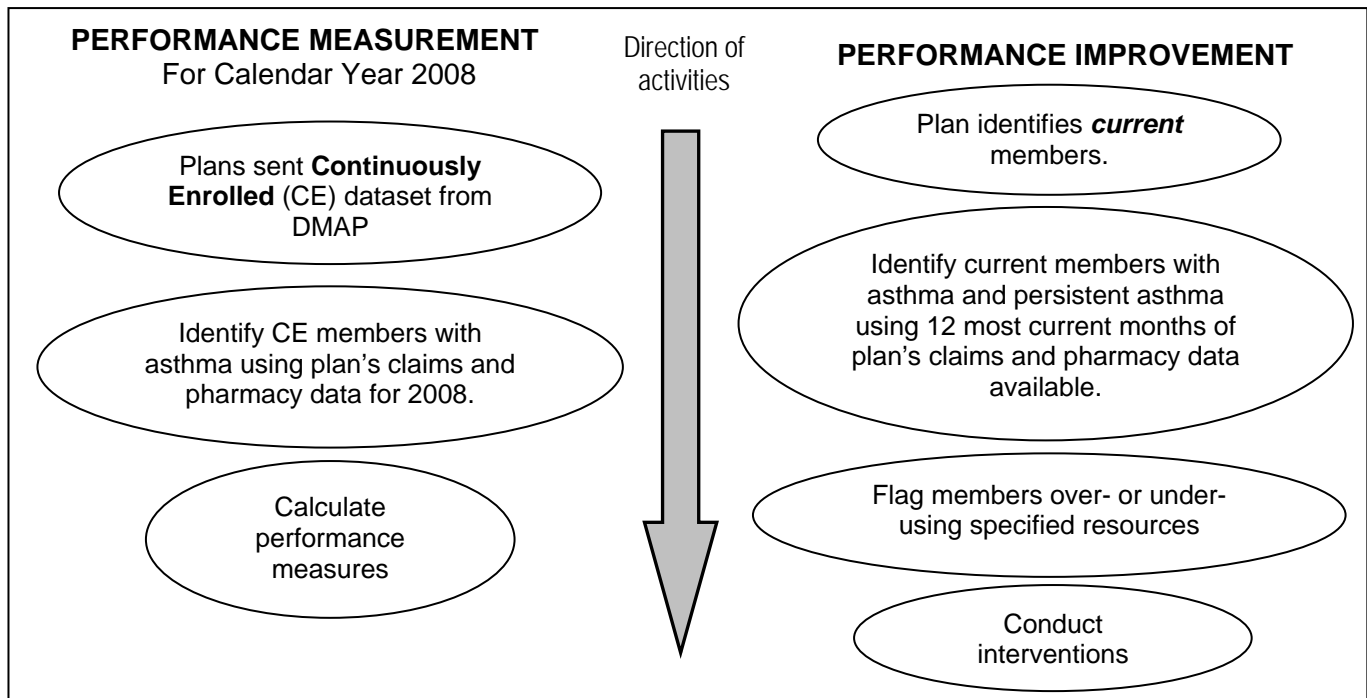
## WHY MEASURE THESE PERFORMANCE MEASURES?

The first step to improving asthma care is to measure past performance with objectives of establishing a baseline and deciding on areas of care in which to improve. Asthma prevalence estimates from the 2007 Behavioral Risk Factor Surveillance System (BRFSS) indicate that more than 355,000 Oregon children and adults have asthma. Among people with asthma, many are not well-controlled. For example, 2005 BRFSS results demonstrate that 60% of asthma patients experienced asthma symptoms at least once a week, and more than 40% of people with asthma limited their usual activities due to asthma. For more information on the burden of asthma in Oregon, please see *The Burden of Asthma In Oregon* report, which can be downloaded at <http://www.oregon.gov/DHS/ph/asthma/pubs.shtml>.

Smoking behavior is also a concern for people with asthma. Oregon BRFSS survey results consistently indicate that smoking is more common among Oregon adults with asthma than those without asthma (see *The Burden of Asthma In Oregon* report); moreover, research literature indicates that smoking decreases the effectiveness of inhaled corticosteroids. Sub-optimal management of asthma may lead to negative outcomes such as missing school, work, or other activities; spending time in emergency departments (EDs) or hospitals; and diminished quality of life. Yet experts agree that with proper management, most people with asthma can maintain normal activity levels, prevent asthma symptoms, and minimize ED visits and hospitalizations.

## LOOKING AHEAD

Measuring indicators is the first step in a comprehensive approach to improving asthma care. This document includes instructions for measuring the chosen asthma indicators and also allows plans to populate an asthma registry of current members for further intervention. The figure below depicts the concepts of “performance measurement” versus “performance improvement” in a flowchart format. Please note that a fully functional, ongoing registry would need regularly scheduled data updates to remain useful over time, which is not depicted in the flowchart. Also, note that “performance improvement” in this figure is for conceptual purposes and does not necessarily represent a flowchart for the Performance Improvement Project.



The Physician's Advisory Council on Asthma, an advisory body to the Oregon Asthma Program that guides priorities for Oregon's population-based asthma efforts, has asserted the importance of two approaches to improving care in the lives of those with asthma. These approaches include the following: 1) ensuring that every person with persistent asthma is taking an inhaled corticosteroid medication, and 2) ensuring that every person with asthma is assessed for smoking and exposure to secondhand smoke and counseled to avoid these triggers if they exist. Currently, many data systems cannot identify persons who smoke or who are exposed to secondhand smoke, but designing systems that do may be one component of a successful performance improvement effort.

## GETTING STARTED

Before measuring these indicators, you will receive a "Continuous Enrollment" (CE) dataset from DMAP with the members of your plan who meet specified criteria. These criteria pertain to enrollment patterns, benefit package, residency, age, and other factors. This dataset will contain all of the necessary identifiers to match with your health plan's administrative data, as well as three pre-calculated variables: BENEFIT, AGE\_GRP, and MEMBERMO. Additional fields include race, language, county, address, city, state, ZIP code, and telephone number; these additional fields are included for the optional purpose of targeted outreach.

BENEFIT designates whether the member was covered by the Standard or the Plus benefit package. This distinction will allow plans that serve both categories of clients to make comparisons between the benefit packages as it pertains to the asthma measures. It will also allow DMAP to make comparisons among plans based on type of benefit package. AGE\_GRP designates the age group for each member (either 4-8, 9-16, or 17-55 years old) as of December 31, 2008. MEMBERMO is the total number of months a member was enrolled in your plan during 2008. If you have questions about these data, please contact Susan Arbor at 503-945-5958. It is anticipated that you will receive this dataset by early July. Once you receive these data, you will need to perform the tasks detailed on the following pages.

The steps outlined on the following pages specify the data manipulations necessary to calculate the asthma performance measures. First, you will identify members in the CE dataset who have asthma. Next you will identify which members have persistent asthma. You will then begin to measure the indicators. Among members with asthma, you will identify occurrences of ED visits for asthma and look for subsequent outpatient follow-up within 30 days. For those with persistent asthma, you will look at dispensings of daily inhaled corticosteroid (ICS) medications, canisters of daily ICS, dispensings of inhaled short-acting bronchodilators (SABs), canisters of inhaled SABs, and the ratio of ICS medications to the sum of ICS and inhaled SAB medications.

## REPORTING THE DATA

A companion to this document is the Excel file entitled "QPI Data Reporting Template." A picture of this file is depicted on page 12. You will be instructed to enter numbers into this spreadsheet after you have performed a series of calculations. Data are reported in units of members or member months and are broken down by benefit package (standard or plus) and by age group (4-8, 9-16, 17-55, and 4-55). The performance measures calculate **automatically** as soon as raw data are entered.

Once the spreadsheet is complete, please e-mail it to Susan Arbor, [susan.a.arbor@state.or.us](mailto:susan.a.arbor@state.or.us), by August 1, 2009. Do NOT include any client-identifiable information in the e-mail or attachment.

## **PROVISION OF REFERENCE AND REPORTING DOCUMENTS TO PLANS**

DMAP will post in your plan's folder on secure ftp3 :

- A dataset of members with six (6) months continuous enrollment (CE) in 2008 (as defined for this measure) that is tailored to your plan

DMAP will send by e-mail:

- A copy of this technical specifications document (filename is "QPI Asthma 2009 Performance Measures Specifications")
- An Excel file called "QPI Asthma 2009 Data Reporting Template"
- An Excel file called "Modified 2009 HEDIS Asthma Denominator List" (which is a list of asthma drugs).

| Task                                  | Description  | Done  |  |           |                     |                                   |                             |   |  |  |
|---------------------------------------|--|---|--|-----------|---------------------|-----------------------------------|-----------------------------|---|--|--|
| 1                                     | <p>Locate the file "Modified 2009 HEDIS Asthma Denominator List.xls", which is a spreadsheet listing all of the National Drug Codes for medications used to treat asthma, and the file "Continuous Enrollment (CE) member dataset" (asthma drug list sent by e-mail from DMAP and the CE member dataset is in your plan's folder on the secure ftp3). Using the CE member dataset, run frequencies to determine how many members were enrolled in the following age groups: 4-8, 9-16, 17-55, and 4-55, separated by Standard and Plus populations. <i>Record the results in row 1 of the QPI Data Reporting Template.</i> (Note: For the CE member data set in the BENEFIT column, 1 = Standard benefit package and 2 = Plus benefit package. In the AGE_GRP column, 1 = 4-8 years old, 2 = 9-16 years old, and 3 = 17-55 years old. The CE membership dataset includes all asthma eligible members based on the DMAP run enrollment criteria. Therefore, do not exclude members.)</p>  |   |  |           |                     |                                   |                             |   |  |  |
| 2                                     | <p>Using the CE member dataset, your plan's <b>adjudicated</b> (paid or denied/rejected but not pending) claims and the Modified 2009 HEDIS Asthma Denominator List, count <u>total dispensing events</u> per CE member <b>during the period January 1 – December 31, 2008</b> for all asthma medications (any medication listed in the Modified 2008 HEDIS Asthma Denominator list qualifies as an asthma medication), using the following logic:</p> <ol style="list-style-type: none"> <li>Any single <u>non-inhaler</u> asthma medication dispensing that is a 30-day or less supply counts as one (1).</li> <li>Any single <u>non-inhaler</u> asthma medication dispensing that is <u>more than a 30-day supply</u> must be divided by 30 and rounded down to convert. For example, a 100-day prescription is equal to 3 dispensing events (100/30 = 3.33, rounded down to 3).</li> <li><u>Inhalers count as one dispensing event. For example, an inhaler with a 90-day supply is considered one dispensing event. In addition, multiple inhalers of the same medication (as identified by Drug_ID in the Modified 2008 HEDIS Asthma Denominator list) filled on the same date of service are counted as one dispensing event. For example, a member may obtain two inhalers on the same day (one for home and one for work), but intend to use both during the same 30-day period. Note: this is only used for identifying people with asthma and persistent asthma, it is not used for determining the number of dispensing of Inhaled Corticosteroids or Short-acting Bronchodilators found in other parts of these specifications.</u></li> <li>Each medication dispensed should be counted separately.</li> <li>Sum the dispensing events into one variable.</li> </ol> |   |  |           |                     |                                   |                             |   |  |  |
| <b>Identifying People With Asthma</b> |  |   |  |           |                     |                                   |                             |   |  |  |
| 3                                     | <p>This step identifies members with <u>asthma</u>. Using the total dispensing events from Task #2 and the following chart, retain only those members (and all of their administrative and pharmacy data) who meet any one or more of the following criteria during the period from January 1 – December 31, 2008.</p> <ol style="list-style-type: none"> <li>Three (3) or more asthma medication dispensings, <b>OR</b></li> <li>One (1) or more acute inpatient discharge(s) with a <u>primary</u> diagnosis of asthma, <b>OR</b></li> <li>One (1) or more Emergency Department (ED) visits with a <u>primary</u> diagnosis of asthma, <b>OR</b></li> <li>Two (2) or more outpatient visits with asthma listed as any of the diagnoses.</li> </ol> <table border="1" data-bbox="184 1271 1864 1437"> <thead> <tr> <th data-bbox="184 1271 472 1341">Type of Event:</th> <th data-bbox="472 1271 724 1341">Asthma ICD-9-CM Diagnosis Code</th> <th data-bbox="724 1271 1276 1341">CPT Codes</th> <th data-bbox="1276 1271 1864 1341">UB-92 Revenue Codes</th> </tr> </thead> <tbody> <tr> <td data-bbox="184 1341 472 1437">Acute Inpatient (Hospitalization)</td> <td data-bbox="472 1341 724 1437">493 (493, 493.x, or 493.xx)</td> <td data-bbox="724 1341 1276 1437">99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291</td> <td data-bbox="1276 1341 1864 1437">010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016X, 020X-022X, 072X, 0987</td> </tr> </tbody> </table>   | Type of Event:  | Asthma ICD-9-CM Diagnosis Code   | CPT Codes | UB-92 Revenue Codes | Acute Inpatient (Hospitalization) | 493 (493, 493.x, or 493.xx) | 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291 | 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016X, 020X-022X, 072X, 0987 |  |
| Type of Event:                        | Asthma ICD-9-CM Diagnosis Code   | CPT Codes   | UB-92 Revenue Codes  |           |                     |                                   |                             |   |  |  |
| Acute Inpatient (Hospitalization)     | 493 (493, 493.x, or 493.xx)  | 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291 | 010X, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016X, 020X-022X, 072X, 0987 |           |                     |                                   |                             |   |  |  |

| Task   | Description   |                                       |  | Done  |  |
|--|---|---------------------------------------|--|---|--|
| <p><b>Task 3 Continues on Next Page move to previous page.</b><br/> <b>Task 3 Continued From Previous Page...</b></p>  |   |                                       |  |   |  |
| <b>Type of Event:</b>  |   | <b>Asthma ICD-9-CM Diagnosis Code</b> | <b>CPT Codes</b>   | <b>UB-92 Revenue Codes</b>                              |  |
| Emergency Department Services  |   | 493 (493, 493.x, or 493.xx)           | 99281-99285  | 045X, 0981  |  |
| Outpatient Visit   |   | 493 (493, 493.x, or 493.xx)           | 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99382-99386, 99392-99396, 99401-99404, 99411, 99412, 99420, 99429, <a href="#">99499</a> | 051X, 0520-0523, 0526-0529, 057X-059X, 077X, 0982, 0983 |  |
| <p>Use these calculation guidelines:</p> <ul style="list-style-type: none"> <li>i. Qualifying encounter data must contain an asthma ICD-9-CM diagnosis code <b>and</b> one of the following: one of the listed CPT codes <b>or</b> one of the listed UB-92 revenue codes.</li> <li>ii. Codes for the ICD-9-CM and UB-92 are expressed at the lowest level of specificity. That means that criteria for a three-digit code could be met by a three-, four-, or five-digit code. For example, if an ICD-9-CM code was specified as 493, the following would meet that criteria: 493, 493.0 to 493.9, or 493.00 to 493.99.</li> <li>iii. Where an “X” appears in the UB-92 revenue or ICD-9—CM diagnosis codes, any number (0 through 9) is allowed to fill that digit.</li> <li>iv. Determine if a member is identified as having asthma because he or she had at least three asthma medication dispensing events <b>and</b> leukotriene modifiers were the <b>sole</b> asthma medication dispensed (where the value of the “OAP_Category” variable begins with “LM”). If so, then the member must meet one of the following criteria to have asthma: <ul style="list-style-type: none"> <li>(a) Meet any of the other three criteria (b-d) above, <b>OR</b></li> <li>(b) Have asthma listed in any diagnosis position in any setting (i.e., inpatient, ED visit, outpatient) during the 2008 year.</li> </ul> </li> <li>v. Delete members who do not meet any of these criteria.</li> <li>vi. Exclusions: Also exclude from the eligible population all members diagnosed with emphysema or chronic obstructive pulmonary disease (COPD) <u>any time</u> on or prior to December 31, 2008, as identified by the following ICD-9-CM codes: <ul style="list-style-type: none"> <li>(a) Emphysema: 492, 506.4, 518.1, 518.2</li> <li>(b) COPD: 491.2, 493.2, 496, 506.4</li> </ul> </li> </ul> |   |                                       |  |   |  |
| 4  | Save the results of Task #3 into a file. Let’s call this the “continuously enrolled members with asthma” (CEMWA) dataset. Now you have identified continuously enrolled members with asthma based solely on claims data.                              |                                       |  |   |  |
| 5  | You’re doing a great job so far!  |                                       |  |   |  |
| 6  | Run frequencies of members and member months on the CEMWA dataset. The output should be broken into age group and benefit package as specified in Task #1. <i>Record the results in rows 2 and 2a in the QPI Asthma 2009 Data Reporting Template.</i> |                                       |  |   |  |

**Identifying People With Persistent Asthma**

|   |   |  |
|---|---|--|
| 7   | <p>Next, in the CEMWA dataset, flag as having <u>persistent asthma</u> those members who meet at least one of the following criteria <b>from January 1 – December 31, 2008</b> using the same methods you employed in Task #3:</p> <ul style="list-style-type: none"> <li>a. Four (4) or more asthma medication dispensings, <b>OR</b></li> <li>b. One (1) or more acute inpatient discharges with asthma as the primary diagnosis, <b>OR</b></li> <li>c. One (1) or more ED visits with asthma as the primary diagnosis, <b>OR</b></li> <li>d. Four (4) or more outpatient visits with asthma listed anywhere as one of the diagnoses <u>and</u> two (2) or more asthma medication dispensings.</li> </ul> <p>For a member identified as having persistent asthma because of at least four asthma medication dispensing events, where leukotriene modifiers (where the value of the “OAP_Category” variable begins with “LM”) were the sole asthma medication dispensed, the member must meet one of the following criteria to be considered as having persistent asthma:</p> <ul style="list-style-type: none"> <li>a. Meet any of the other three criteria (b-d) above, <b>OR</b></li> <li>b. Have asthma listed in any diagnosis position in any setting (i.e., inpatient, ED visit, outpatient) during the 2008 year.</li> </ul>             |  |
| 8   | <p>Run frequencies of members and member months for those flagged with persistent asthma from Task #7. The output should be broken into age groups and benefit packages as specified in Task #1. <i>Record the results in rows 3 and 3a in the QPI Asthma 2009 Data Reporting Template.</i></p>   |  |
| <b>ED Visits For Asthma and Follow-up Outpatient Care</b> |   |  |
| 9   | <p>Flag members with <u>asthma</u> who have had one or more ED visits with a <u>primary</u> diagnosis of asthma during the period from January 1 – December 31, 2008. <u>Do not count ED visits that led to a hospitalization.</u> Run frequencies of members and member months, by age group and benefit package. <i>Record the results in rows 4 and 4a in the QPI Asthma 2009 Data Reporting Template.</i></p>   |  |
| 10  | <p>Among members with <u>asthma</u>, count the number of ED visits with a primary diagnosis of asthma during the period from January 1 – December 31, 2008 per member. Total these ED visits by age group and benefit package. <i>Record the results in row 5 in the QPI Asthma 2009 Data Reporting Template.</i></p>   |  |
| 11  | <p>For each ED visit identified in the last step, determine whether an outpatient visit with a diagnosis code of 460-519 (in <u>any diagnosis position</u>) took place <math>\geq 1</math> to <math>\leq 30</math> days after the ED visit. To identify an outpatient visit, refer to the table in task 3 and use the CPT codes and UB-92 revenue codes for “Outpatient Visits” and the expanded ICD-9-CM Diagnosis Codes of 460-519. Count ED visits that received such follow-up. Total these ED visits by age group and benefit package. <i>Record the results in row 6 in the QPI Asthma 2009 Data Reporting Template.</i></p> <p>Calculation notes:</p> <ul style="list-style-type: none"> <li>a. The range of dates during which the follow-up could have occurred is January 2, 2008 – January 30, 2009.</li> <li>b. One outpatient visit may be counted toward more than one ED visit as long as the outpatient visit occurred between 1 and 30 days after each ED visit.</li> <li>c. Be careful not to count an ED visit more than once. Most ED visits will generate numerous codes (facilities codes, CPT codes, etc.). If multiple data sources are used for case finding, be cautious not to overstate the true visit count. Also, if possible in your data system, do not count ED visits that led to a hospitalization.</li> </ul> |  |

| <b>Inhaled Corticosteroids (ICS)</b>       |   |
|--|---|
| 12   | Using the Excel file “Modified 2009 HEDIS Asthma Denominator List.xls,” select only those records (NDC codes) where the value of the “OAP_Category” variable is either “AI CS Inhaled” or “AI CS LAB Inhaled.” This is a list of inhaled corticosteroid (ICS) medications. Then, using this list and the CEMWA file, flag members who have received one or more dispensings of ICS medications during the time period from January 1 – December 31, 2008. This flag indicates whether a member filled one or more prescription(s) for an ICS.   |
| 13   | For members with <u>persistent asthma</u> (from Task #7), run frequencies on the flag in Task #12 by members and member months, by age group and benefit package. <i>Record the results in rows 7 and 7a in the QPI Asthma 2009 Data Reporting Template.</i>  |
| <b>Short-acting Bronchodilators (SABs)</b> |   |
| 14   | Again, using the Excel file “Modified 2009 HEDIS Asthma Denominator List.xls,” select only those records (NDC codes) where the value of the “OAP_Category” variable is either “SAB Inhaled” or “SAB AC Inhaled.” This is a list of inhaled short-acting bronchodilators (SABs) – DO NOT INCLUDE ORAL BRONCHODILATORS (“SAB Oral”)! Then, using this list and the CEMWA file, count <u>dispensings</u> of inhaled SABs during the time period from January 1 – December 31, 2008 by member. Save this value for use in Task #18.   |
| 15   | Divide the count created in Task #14 by the member months for each member. Create a flag for those members where the proportion of the count to the member months is greater than 0.5. For members with <u>persistent asthma</u> (from Task #7), run frequencies on this flag by members and member months, by age group and benefit package. <i>Record the results in rows 8 and 8a in the QPI Asthma 2009 Data Reporting Template.</i>  |
| 16   | Obtain information from your plan’s pharmacy data or pharmacy benefits manager pertaining to the <u>quantity</u> of the drugs identified in Task #14. The variable you are looking for may be named “Metric Quantity” or “Quantity”. Using the variable “Pkg_Size” in the Excel file “Modified 2009 HEDIS Asthma Denominator List.xls,” calculate the number of canisters of inhaled SABs dispensed by dividing the quantity of each applicable medication from your plan’s pharmacy data by the corresponding “Pkg_Size” for that medication, then sum the number of canisters for each member. <b>For medications in which the “Pkg_Size” variable equals zero (0), count one (1) canister.</b> This last method is a work-around for medications in which a common package size is not readily available; hence, the method simply treats these medications as a single dispensing. <b>Save this count of inhaled SAB canisters for use in Task #19.</b><br><br>NOTE: Tasks #16 and #17 more accurately measure inhaled SAB use by measuring the amount of inhaled SAB medication used by each member. |
| 17   | Divide the count created in Task #16 by the member months for each member. Create a flag for those members where the proportion of the count to the member months is greater than 0.5. For members with <u>persistent asthma</u> (from Task #7), run frequencies on this flag by members and member months, by age group and benefit package. <i>Record the results in rows 9 and 9a in the QPI Asthma 2008 Data Reporting Template.</i>  |
| <b>Medication Ratio</b>                    |   |
| 18   | Similar to Task #16, obtain information from your plan’s pharmacy data or pharmacy benefits manager pertaining to the <u>quantity</u> of the inhaled corticosteroid (ICS) drugs identified in Task #12. The variable you are looking for may be named “Metric Quantity” or “Quantity”. Using the variable “Pkg_Size” in the Excel file “Modified 2009 HEDIS Asthma Denominator List.xls,” calculate the number of canisters of ICS dispensed by dividing the quantity of each applicable medication from your plan’s  |

CE=Continuous Enrollment member dataset

CEMWA=continuously enrolled members with asthma dataset

|    |   |  |
|----|---|--|
|    | <p>pharmacy data by the corresponding “Pkg_Size” for that medication, then sum the number of canisters for each member. <b>For medications in which the “Pkg_Size” variable equals zero (0), count one (1) canister.</b> As before, this method is a work-around for medications in which a common package size is not readily available. <b>Save this count of ICS canisters for use in Task #20.</b></p> <p>NOTE: Similar to Task #16, Task #18 more accurately measures ICS use by measuring the amount of ICS medication used by each member.</p>   |  |
| 19 | <p>Using the number of canisters or nebulizers of inhaled SABs from Task #16, create a flag for those members where the number is greater than or equal to two. For members with <u>persistent asthma</u> (from Task #7), run frequencies on this flag by members and member months, by age group and benefit package. <i>Record the results in rows 10 and 10a in the QPI Asthma 2009 Data Reporting Template.</i></p>   |  |
| 20 | <p>Using the flag created in Task #19 (i.e., only those members who had two or more SAB canisters or nebulizers in Task #16), calculate the following ratio: divide the number of ICS canisters created in Task #18 by the sum of the ICS canisters created in Task #18 and the inhaled SAB canisters created in Task #16.</p> <p>Ratio = <math display="block">\frac{\text{(Canisters of inhaled corticosteroid from Task \#18)}}{\text{(Canisters of inhaled corticosteroid from Task \#18) + (Canisters of inhaled short-acting bronchodilators from Task \#16)}}</math></p> <p>Create a flag for those members where the ratio of ICS canisters to the sum of ICS and inhaled SAB canisters is <b>greater than or equal to 0.33</b>. For members with <u>persistent asthma</u> (from Task #7), run frequencies on this flag by members and member months, by age group and benefit package. <i>Record the results in rows 11 and 11a in the QPI Asthma 2009 Data Reporting Template.</i></p>  |  |
| 21 | <p><u>Optional and recommended:</u> Nearly identical to Task #20, using the flag created in Task #19 (i.e., only those members who had two or more SAB canisters or nebulizers in Task #16), calculate the following ratio: divide the number of ICS canisters created in Task #18 by the sum of the ICS canisters created in Task #18 and the inhaled SAB canisters created in Task #16.</p> <p>Ratio = <math display="block">\frac{\text{(Canisters of inhaled corticosteroid from Task \#18)}}{\text{(Canisters of inhaled corticosteroid from Task \#18) + (Canisters of inhaled short-acting bronchodilators from Task \#16)}}</math></p> <p>Create a flag for those members where the ratio of ICS canisters to the sum of ICS and inhaled SAB canisters is <b>greater than or equal to 0.50</b>. For members with <u>persistent asthma</u> (from Task #7), run frequencies on this flag by members and member months, by age group and benefit package. <i>Record the results in rows 12 and 12a in the QPI Asthma 2009 Data Reporting Template.</i></p> |  |
| 22 | <p>You have successfully completed the Asthma Performance Measures and measures for the Asthma Performance Improvement Project. Good work!</p>  |  |

This is what the QPI Data Reporting Template looks like (without data entered)

| Please use the QPI Asthma Performance Measure Specifications for directions on how to fill out this spreadsheet. Fill in the plan name, the updated date, and cells that are colored light blue/green. This workbook contains the following spreadsheets: |   |         |         |   |         |         |         |         |         |         |                       |
|---|---|---------|---------|---|---------|---------|---------|---------|---------|---------|-----------------------|
| <a href="#">Indicator Spreadsheet - Raw Data</a>  |   |         |         | <a href="#">Indicator Calculation Spreadsheet</a> |         |         |         |         |         |         |                       |
| <b>Name of person who filled out template:</b>  |   |         |         |   |         |         |         |         |         |         |                       |
| <b>Plan name:</b>   |   |         |         |   |         |         |         |         |         |         |                       |
| <b>Updated:</b>   |   |         |         |   |         |         |         |         |         |         |                       |
| <b>Indicator Spreadsheet - Raw Data</b>   |   |         |         |   |         |         |         |         |         |         |                       |
| Age on December 31, 2008  |   |         |         |   |         |         |         |         |         |         |                       |
| Age on December 31, 2008  |   |         |         |   |         |         |         |         |         |         |                       |
| Age 4 to 8    Age 9 to 16    Age 17 to 55    Total    Age 4 to 8    Age 9 to 16    Age 17 to 55    Total  |   |         |         |   |         |         |         |         |         |         |                       |
| 1   | # of Members who had 6 months enrollment between 1/1/2008 and 12/31/2008 (in your plan's folder on secure ftp3)   |         |         |   | 0       |         |         |         |         | 0       | Task #1               |
| 2   | # of Members who met asthma criteria  |         |         |   | 0       |         |         |         |         | 0       |                       |
| 2a  | Sum total of the months enrolled for those members who met asthma criteria  |         |         |   | 0.0     |         |         |         |         | 0.0     | Task #6               |
| 3   | # of Members who met persistent asthma criteria   |         |         |   | 0       |         |         |         |         | 0       |                       |
| 3a  | Sum total of the months enrolled for those members who met persistent asthma criteria   |         |         |   | 0.0     |         |         |         |         | 0.0     | Task #8               |
| 4   | # Members who met the asthma criteria and had >=1 ED visit with primary asthma dx   |         |         |   | 0       |         |         |         |         | 0       | Task #9               |
| 4a  | Sum total of the months enrolled for the Members who met #4 criteria  |         |         |   | 0.0     |         |         |         |         | 0.0     |                       |
| 5   | # of ED visits with a primary asthma dx   |         |         |   | 0       |         |         |         |         | 0       | Task #10              |
| 6   | # of ED visits with a primary asthma diagnosis that had an outpatient visit with a respiratory diagnosis >=1 to <=30 days after that ED visit   |         |         |   | 0       |         |         |         |         | 0       | Task #11              |
| 7   | # of Members who met the persistent asthma criteria and who had >= 1 inhaled corticosteroid (ICS) dispensings   |         |         |   | 0       |         |         |         |         | 0       | Task #13              |
| 7a  | Sum total of the months enrolled for the Members who met #7 criteria  |         |         |   | 0.0     |         |         |         |         | 0.0     |                       |
| 8   | # of Members who met the persistent asthma criteria and who had > 0.5 inhaled short-acting bronchodilator (SAB) dispensings (in the form of metered dose inhalers (MDIs) or nebulizers) per month enrolled [Standard] |         |         |   | 0       |         |         |         |         | 0       | Task #15              |
| 8a  | Sum total of the months enrolled for the Members who met #8 criteria  |         |         |   | 0.0     |         |         |         |         | 0.0     |                       |
| 9   | # of Members who met the persistent asthma criteria and who had > 0.5 SAB MDI canisters or SAB nebulizer dispensings converted to canisters per month enrolled [Enhanced]   |         |         |   | 0       |         |         |         |         | 0       | Task #17              |
| 9a  | Sum total of the months enrolled for the Members who met #9 criteria  |         |         |   | 0.0     |         |         |         |         | 0.0     |                       |
| 10  | # of Members who met the persistent asthma criteria and who had 2 or more inhaled SAB canisters or nebulizer dispensings in a year.   |         |         |   | 0       |         |         |         |         | 0       | Task #19              |
| 10a   | Sum total of the months enrolled for Members who met #10 criteria.  |         |         |   | 0.0     |         |         |         |         | 0.0     |                       |
| 11  | # of Members who met the persistent asthma criteria, had 2 or more inhaled SAB canisters, and had a ratio of ICS canisters to the sum of ICS and inhaled SAB canisters (in MDI or nebulizer form) that is >=0.33.     |         |         |   | 0       |         |         |         |         | 0       | Task #20              |
| 11a   | Sum total of the months enrolled for Members who met #11 criteria.  |         |         |   | 0.0     |         |         |         |         | 0.0     |                       |
| 12  | # of Members who met the persistent asthma criteria, had 2 or more inhaled SAB canisters, and had a ratio of ICS canisters to the sum of ICS and inhaled SAB canisters (in MDI or nebulizer form) that is >=0.50.     |         |         |   | 0       |         |         |         |         | 0       | Task #21              |
| 12a   | Sum total of the months enrolled for Members who met #12 criteria.  |         |         |   | 0.0     |         |         |         |         | 0.0     |                       |
| Age on December 31, 2008  |   |         |         |   |         |         |         |         |         |         |                       |
| Age on December 31, 2008  |   |         |         |   |         |         |         |         |         |         |                       |
| <b>Indicator Calculation Spreadsheet</b>  |   |         |         |   |         |         |         |         |         |         |                       |
| Age 4 to 8    Age 9 to 16    Age 17 to 55    Total    Age 4 to 8    Age 9 to 16    Age 17 to 55    Total  |   |         |         |   |         |         |         |         |         |         |                       |
| 1a  | % of Members who met the asthma criteria and who had >=1 ED visit with primary asthma dx, in member months  | #DIV/0! | #DIV/0! | #DIV/0!   | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | Indicator 1 - Part a  |
| 1b  | % of ED visits with a primary asthma dx that had outpatient visit with a respiratory dx >=1 to <=30 days after the ED visit   | #DIV/0! | #DIV/0! | #DIV/0!   | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | Indicator 1 - Part b  |
| 2a  | % of Members who met the persistent asthma criteria and who had >=1 inhaled corticosteroid (ICS) dispensings in the past year, in member months   | #DIV/0! | #DIV/0! | #DIV/0!   | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | Indicator 2 - Part a  |
| 2b  | % of Members who met the persistent asthma criteria and who had >0.5 inhaled short-acting bronchodilator (SAB) MDI or nebulizer dispensings per month enrolled in the past year, in member months                     | #DIV/0! | #DIV/0! | #DIV/0!   | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | Indicator 2 - Part b  |
| 2c  | % of Members who met the persistent asthma criteria and who had >0.5 inhaled SAB canisters or nebulizer dispensings per month enrolled of the past year, in member months   | #DIV/0! | #DIV/0! | #DIV/0!   | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | Indicator 2 - Part c  |
| 2d  | % of Members who met the persistent asthma criteria and had 2 or more inhaled SAB canisters, who had a medication ratio >=0.33, in member months (see the tech specs for a description of the ratio)                  | #DIV/0! | #DIV/0! | #DIV/0!   | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | Indicator 2 - Part d  |
| 2d'   | % of Members who met the persistent asthma criteria, had 2 or more inhaled SAB canisters, and who had a medication ratio >=0.50, in member months (see the tech specs for a description of the ratio)                 | #DIV/0! | #DIV/0! | #DIV/0!   | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | Indicator 2 - Part d' |

## HISTORY OF CHANGES TO THE QPI SPECIFICATIONS SINCE 2005 (THE 2004 MEASUREMENT YEAR)

### Year 2005 (for measurement year 2004)

Only adjudicated (paid or denied/rejected but not pending) health plan claims are counted towards calculations to align with HEDIS specifications

Changing the method for rounding the dispensings calculation to align with the HEDIS 2005 specifications: Prior to this change a prescription for 100 days is divided by 30 (30 days) and results in 3.33, which would be rounded up to 4 dispensing. After the change the result of 3.33 is rounded down to 3 dispensings.

Addition of CPT codes for qualifying emergency department and inpatient asthma encounters to align with HEDIS 2005 specifications: Added CPT codes 99356 and 99357 to the list of codes for a patient to have a qualifying emergency department and inpatient asthma encounter.

Addition of UB-92 codes for qualifying emergency department and inpatient asthma encounters to align with HEDIS 2005 specifications: Added UB-92 codes 72X and 80X to the list of codes for a patient to have a qualifying emergency department and inpatient asthma encounter.

### Year 2006 (for measurement year 2005)

Indicators using inhaled medication dispensing changed from any anti-inflammatory asthma medication to any inhaled corticosteroid medication to align with the published literature: The specification previously used three codes (AI CS Inhaled (Inhaled Corticosteroid), AI CS LAB Inhaled (Inhaled Steroid Combination), and AI MC Inhaled (Inhaled Mast Cell Stabilizer)). Starting in this year the AI MC Inhaled medications were dropped.

Added indicator 2d (percentage of members who met persistent asthma criteria and had two or more inhaled SABA canisters or nebulizer dispensings who had a medication ratio greater than or equal to 0.33)

DMAP added race, language, county, address, city, state, zip code, and telephone number to Continuous Enrollment (CE) dataset. This does not affect indicators.

### Year 2007 (for measurement year 2006)

Changed CPT and UB-92 revenue codes for outpatient, ED, and acute inpatient visits to align with HEDIS 2007 specifications: Added and removed a number of CPT and UB-92 revenue codes (see HEDIS 2007 for full list).

Exclusion of people with COPD or emphysema from list of people with asthma or persistent asthma: This is a longstanding optional exclusion in the HEDIS specifications. The ADWG/QPI indicators use a 6-month enrollment period instead of the HEDIS two-year enrollment period to accommodate the dynamic nature of Medicaid enrollment. However, this departure likely results in more people identified as having asthma and persistent asthma when, in fact, they do not. It was decided to use the COPD or emphysema exclusion to reduce this issue.

Only count ED visits that did not lead to a hospitalization: This was added so that ED visits that lead to a hospitalization are not counted toward both an ED visit and a hospitalization.

#### **Year 2008 (for measurement year 2007)**

No changes

#### **Year 2009 (for measurement year 2008)**

Included use of Drug ID for the purpose of identifying people with asthma or persistent asthma to align with HEDIS 2008 specifications: Inhalers count as one dispensing event. For example, an inhaler with a 90-day supply is considered one dispensing event. In addition, multiple inhalers of the same medication (as identified by Drug ID in the Modified 2008 HEDIS Asthma Denominator list) filled on the same date of service are counted as one dispensing event. For example, a member may obtain two inhalers on the same day (one for home and one for work), but intend to use both during the same 30-day period. Note: this is only used for identifying people with asthma and persistent asthma, it is not used for determining the number of dispensing of Inhaled Corticosteroids or Short-acting Bronchodilators in other parts of these specifications.

Include only last two years of HEDIS medication list to align with uses of Drug ID in the HEDIS 2008 specification: To use the Drug\_ID code, which started in HEDIS 2008 we will use only two years of HEDIS medication lists merged together. This will allow for counting medications that may be phased out while removing medications from the list that have not been used in more than two years or that are now deemed inappropriate to use for people with asthma. The Oregon Asthma Program will maintain the full medication list for reference.

Removed CPT code 99499 from outpatient visit type table to align with HEDIS 2009 specifications: Removed CPT code 99499 from outpatient visit type table in task 3.

Discussion on use of Kaiser Permanente medications weights: Use of the weights has been discussed a number of times. For the indicators it was decided not to use weights since they only cover about a quarter of appropriate medications for people with asthma and all other plans are using unweighted medication data for their interventions. No change, included for documentation.

Discussion on the effect of the emphysema and COPD exclusion on ED visit follow-up: This discussion was based on discovery that when the COPD and emphysema exclusion was included in the 2006 measurement year that there is the possibility to have a followup in the next year (30 days after the ED visit) where a member could be diagnosed with COPD or emphysema when otherwise they would be excluded from the population. Three plans checked to see if this ever occurs and found no occurrence. The chance of this happening is remote and there was strong feeling that the followup should be included. No change, included for documentation.

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